

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	4747400
<b>Application Number:</b>	10801208
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	2034
<b>Title of Invention:</b>	Methods of manufacturing semiconductor devices having a ruthenium layer via automatic layer deposition
<b>First Named Inventor/Applicant Name:</b>	Kwang-hee Lee
<b>Customer Number:</b>	20792
<b>Filer:</b>	D. Randal Ayers/Paula Fisher
<b>Filer Authorized By:</b>	D. Randal Ayers
<b>Attorney Docket Number:</b>	5649-1277
<b>Receipt Date:</b>	06-FEB-2009
<b>Filing Date:</b>	16-MAR-2004
<b>Time Stamp:</b>	12:22:59
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$180
RAM confirmation Number	7303
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## File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		5649-1277_IDSand1449C.pdf	346792 818e14dc204536c03d0c3807539263896d32795a8	yes	3
<b>Multipart Description/PDF files in .zip description</b>					
	<b>Document Description</b>		<b>Start</b>		<b>End</b>
	Information Disclosure Statement Letter		1		2
	Information Disclosure Statement (IDS) Filed (SB/08)		3		3
<b>Warnings:</b>					
<b>Information:</b>					
2	Foreign Reference	5649-1277_For_Ref_KR_2002_0045269A.pdf	1063089 56408b8ased70452f13f9f38f8f0f08f880c0446	no	14
<b>Warnings:</b>					
<b>Information:</b>					
3	Foreign Reference	5649-1277_For_Ref_KR_10_202_0094175A.pdf	1036101 a37a5eae354db159278c78f986ee6e1b7035232a098	no	10
<b>Warnings:</b>					
<b>Information:</b>					
4	NPL Documents	5649-1277_NPL_US_Office_Action_Pat_App_11616406.pdf	2576083 88cd8f308cd1f8e06a0729f38a41575a683f6879	no	28
<b>Warnings:</b>					
<b>Information:</b>					
5	Fee Worksheet (PTO-06)	fee-info.pdf	30058 c7adcf49f8bccc5b38702c418eabc04c7a4da137	no	2
<b>Warnings:</b>					
<b>Information:</b>					
<b>Total Files Size (in bytes):</b>			5052123		

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**New Applications Under 35 U.S.C. 111**

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

**National Stage of an International Application under 35 U.S.C. 371**

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

**New International Application Filed with the USPTO as a Receiving Office**

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.